

Solve the given system using substitution and/or elimination. Classify the system as having one solution, no solutions, or infinite solutions. Check your answer both algebraically and graphically.

$$\begin{cases} \frac{x+2y}{4} = -5 \\ \frac{3x-y}{2} = 1 \end{cases}$$

**Exercise 1** Classify this system as having one solution, no solutions, or infinite solutions.

**Multiple Choice:**

- (a) one solution ✓
- (b) no solutions
- (c) infinite solutions

**Exercise 1.1** The solution to this system is  $\left(\boxed{-\frac{16}{7}}, \boxed{-\frac{62}{7}}\right)$ .